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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,311	08/10/2001	Mohammad Mehdiانpour	P01,0114	8475

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EXAMINER

BOSWELL, ALAN M

ART UNIT PAPER NUMBER

3729

DATE MAILED: 04/17/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/913,311

Applicant(s)

MEHDIANPOUR ET AL. *CW*

Examiner

Alan M Boswell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-28 is/are rejected.
- 7) ☒ Claim(s) 29-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

1. Claims 29-36 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 29-36 are dependent on claim 10, which has been cancelled. These claims have not further been treated on the merits. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 19-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 19, there is inconsistency between the language in the preamble drawn to an apparatus for equipping a substrate with electrical components and certain portions of the body of components. For example, in Claim 19, the recitation of the limitations ~~"limitation"~~ "whereby components picked up by the at least one gripper" (in line 11) renders the scope of the claim as being vague and indefinite because it is unclear if the intent is to claim either the subcombination of the apparatus alone or the combination of the apparatus and the components.

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The applicant is asked to please clarify what subject matter the claim is intended to be drawn to, i.e., the apparatus and components, where the language of the claims is to be amended to be consistent with this intent. The Examiner has assumed that the Applicants intended to claim the combination.

Regarding claim 20 the same problem above occurs with the limitation "wherein the components are fixed at the holding end of the at least one gripper" (in lines 1 and 2).

4. Regarding claim 25, the phrase "grid-like fashion" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "grid-like fashion"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5743005 to Nakao.

Nakao teaches movable fitting head 9 for handling the components 11 the

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fitting head having a transfer station 21, stator 13, a pivot element 8, at one least gripper 15 and at least one storage element 1 including a plurality of storage spaces 3 for the components 11; the at least one gripper 15 having a holding end capable of picking up the component at feeding devices and transporting and placing the components to fitting locations on the substrate; and at least one storage element 1 being separate from the at least one gripper 15 and movable relative thereto along with the plurality of storage spaces 3 (see wound on a reel, 2), whereby components 11 picked up by the at least one gripper 15 can be deposited at the plurality of storage spaces 3 of the at least one storage element 3 via the at least one gripper onto the substrate 5.

Regarding claim 20, Nakao teaches components 11 are fixed at the holding end of the at least one gripper 15, the holding end being movable transversely with respect to a placement direction of the component into a transfer position assigned to the transfer station 21 on the fitting head 9 and the plurality of storage spaces 3 in the fitting head 9 being successively displaced to the transfer station 21.

Regarding claim 21, Nakao teaches at least one gripper 15 is mounted on the pivoting element 8 of the fitting head 9 and holding end pivoted transversely with respect to the placement direction, between a placement station 29 and the transfer station 21 via the pivoting element 8.

Regarding claim 22, Nakao teaches at least one gripper 15 is mounted on the pivoting element 8 such that at least one gripper is displaceable longitudinally in the placement direction (see Figs 6 and 7).

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Regarding claim 23, Nakao teaches the holding end in the transfer station 21 is displaceable longitudinally in a direction relative to one of the plurality of storage spaces 3 (see reel, 2).

Regarding claim 24, Nakao teaches at least one gripper is suction device 15 and a pressure condition in the suction device in the transfer position is controlled such that a holding force is greater that or less than a holding force exerted by one of the plurality of storage spaces. Note: The electronic component is attached to the reel 2 as the suction device's force is able remove the part from the storage unit. Hence, the force required to keep the electronic component on the reel is over come by the suction device pressure.

Allowable Subject Matter

7. Claims 25-28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to show the state of the art in the manufacturing a device for fitting substrates with electrical components.

US Patent No. 5410801 to Shiloh

Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group

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clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan M Boswell whose telephone number is (703) 305-0308. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2572.

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Petitions/Special Programs	(703) 305-9285
Terminal Disclaimers	(703) 305-8408
PCT Help Desk	(703) 305-3257


If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	http://www.uspto.gov

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April 14, 2003



A. DEXTER TUGBANG
PATENT EXAMINER